

**REMARKS**

The Examiner objects to claim 2 as reciting "that that" in line 3. Claims 2 has been amended to remove one instance of "that."

Claims 1, 3 and 5 are rejected under 35 USC 102(e) as being anticipated by Broyles et al.

The Examiner cites Broyles column 6 line 26 to column 8 line 7 as teaching that the mobile station's access is delayed until the unique challenge authentication is completed successfully and reads this teaching on Applicants' claim 1 step of "in response to receiving the second message, determining whether to initiate call setup for the mobile station prior to the second authentication procedure completing successfully." Applicants believe that the Examiner has misinterpreted Broyles.

Broyles teaches a method of preventing replay attacks by a mobile station. When the mobile station attempts to access communication services from the network, the mobile station transmits a security value generated by the MSC to the network along with other identifying information. (Broyles, col. 7, lines 33-38). The network uses this information to authenticate the mobile station (first authentication procedure). (Broyles, col. 7, lines 38-45). If the network determines that the mobile station has already attempted to access service from the network using the same security value (i.e., a potential fraudulent mobile station), the AC in the network generates a unique challenge security value which is communicated to the mobile station. The mobile station uses the unique challenge security value to generate a unique authentication signature and communicates it to the network. The network uses the unique authentication signature to attempt to authenticate the mobile station (second authentication procedure). If the unique authentication signature communicated by the mobile matches the unique authentication signature generated by the network, the mobile station is assumed to be legitimate. (Broyles, col. 7, line 51 to col. 8, line 7). If the two signatures match, the mobile station is granted access to telephone service. If the two signatures do not match, the MS is denied access to service. (Broyles, col. 9, lines 21-26).

Broyles does not teach Applicants' claim 1 step of ". . . determining whether to initiate call set up for the mobile station prior to the second authentication procedure completing successfully." Broyles teaches always waiting until the second authentication procedure is successful before initiating call setup. Applicants note that the Examiner is in agreement with this characterization of Broyles. On page 3 of the final office action, the Examiner cites col. 6, line 26 to column 8, line 7 as teaching the mobile station's access is delayed until the unique challenge authentication is completed successfully. The Examiner purports to read this on "claimed determining not to initiate call setup until the unique challenge authentication is completed successfully." The Examiner, however, misquotes Applicants' claim because Applicants do not claim "determining not to initiate call setup" until the unique challenge authentication is completed successfully. Rather, claim 1 recites ". . . determining *whether to initiate* call setup *prior to* the second authentication procedure completing successfully.

Claims 1, 3 and 5 are rejected under 35 USC 103(a) as being unpatentable over US 6665530 (Broyles) in view of US 2001/0025345 (Jung). With respect to claim 1 and as stated with respect to the 35 USC 102 rejection discussed above, the Examiner cites Broyles column 6, line 26 to column 8, line 7 as teaching that the mobile station's access is delayed until the unique challenge authentication is completed successfully. Applicants agree with this characterization of Broyles, but assert that delaying the mobile station's access until the unique challenge authentication is completed successfully does not read on "in response to receiving the second message, determining whether to initiate call setup for the mobile station prior to the second authentication procedure completing successfully." In Applicants' claim 1, a determination is made whether to initiate call set prior to the second authentication procedure completing successfully. Broyles teaches waiting for the unique challenge authentication (second authentication procedure) to complete successfully before initiating call set up. (Broyles column 9 lines 13-26).

Neither Broyles nor Jung teaches the claim 1 elements of "in response to receiving the second message, determining whether to initiate call setup for the

mobile station prior to the second authentication procedure completing successfully." Thus, claim 1 is patentable over Broyles and Jung, alone or in combination.

The Examiner rejects claim 2 under USC 103(a) as being unpatentable over Broyles in view of Patel. The Examiner asserts that Broyles teaches a first authentication and when the first authentication completes successfully (with a result of authentication failure), a second authentication is performed. The call is set up only when the second authentication authenticates the mobile station. The Examiner admits that Broyles fails to teach "initiating a call setup before the authentication procedure has completed" and cites Servi column 2 line 66-68 as teaching "upon call initiation, an authentication is performed before the call is connected.

Applicants submit that the Examiner misinterprets the teaching of Servi. Servi teaches a plurality of wireless network control stations that allow a plurality of wireless devices to connect to the public switched telephone network. (Column 2, lines 58-62.) To provide proper billing for a call, the control stations must determine and validate the identity of the wireless caller. Accordingly, upon call initiation, the calling wireless device must transmit an identification signal to be verified at the wireless network control station before allowing the connection to the public network 30. (Column 2, line 66 to column 3, line 2). The Examiner incorrectly equates call initiation (performed by the mobile device) with call set up (performed by the network). Servi, column 2, lines 58-62, teaches that when the wireless device initiates a call, the network control station authenticates the device before connecting the device to the network (i.e., before initiating call set up). Applicants claim initiating call setup before authentication is completed. Specifically, claim 2 recites ". . . when the first parameter indicates that the first authentication completed successfully, Initiating call set setup before the second authentication procedure has completed . . ."

Thus, Servi does not teach "initiating a call setup before the authentication procedure has completed." As such, Applicants' claim 2 is patentable over Broyles and Servi, alone or in combination.

In view of the foregoing amendments and remarks, Applicants submit that independent claim 1 is allowable over the art cited. Applicants further submit that dependent claims 2, 5 and 6 are allowable by virtue of their dependency on claim 1 and for the reasons stated above (claim 2). Claims 3 has been cancelled, thus mooted the rejection of that claim. Applicant requests the reconsideration and reexamination of this application and the timely allowance of the pending claims. Please charge any fees associated herewith, including extension of time fees, to 50-2117.

Respectfully submitted,  
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